

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002422**Date Inspected:** 22-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Lv Li Qing, and Hu Wei Qing			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	See Below	

**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector, M. Paul Stovall, was present at Zhenghua Port Machinery Company (ZPMC) on Changxing Island, Shanghai, China to monitor the Quality Control (QC) functions during the fabrication of the Self Anchored Suspension (SAS) section of the San Francisco/Oakland Bay Bridge.

**OBG Preassembly Bay 2**

The QA Inspector observed ZPMC personnel cut plate material for use on the SFOBB Tower.

**OBG Preassembly Bay 3**

The QA Inspector observed ZPMC welders Wang Zhonghua, ID #053753, Lv Peng, ID 048617, and Zhang Feng, ID #049769 fit and tack weld stiffeners onto Side Plates (SP) SP567-001, SP606-001, and SP527-001, and End Plate (EP) EP002-02.

The QA Inspector observed ZPMC welders Fu Yanjie, ID #066268 weld Complete Joint Penetration (CJP) welds on W21 X 57's that will later become WT stiffeners.

The QA Inspector observed ZPMC personnel weld repairing SP307-001, SP121-001, SP361-001, and SP094-001. The ZPMC welder is Li Xuehua, ID #058174, the WPS used is WPS-B-T-2231-B-U2-F, and the QA Inspector verified the welding parameters as 308 amperes (amps) and 30.1 volts.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

### OBG Preassembly Bay 4

The QA Inspector observed ZPMC personnel fit and tack weld Internal Tower Diaphragm plate numbers P830 to SA318, 33-meter, this is given the weld number of ESD1-SA318-A/B-3A (4A), P414 to SA238, this is given weld number ESD1-SA238-A/B-4A (3A), P546-SA27, 43-meter, this is given weld number ESD1-SA238-A/B-4A (3A).

The ZPMC welders who performed the above-mentioned work are Du Hongxia, ID #037779, and Han Xiaofeng, ID #054467.

The QA Inspector observed ZPMC personnel grind fillet welds on Side and Bottom Plates, and for ZPMC welder Dai Lu, ID #048659 to make minor weld repairs on undercut, overlap, etc.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

### OBG Preassembly Bay 7

The QA Inspector observed ZPMC QC personnel checking the flatness of spliced plates used for Floor Beams, marking them as needed, and then heat straightening them.

The QA Inspector observed ZPMC personnel fit and tack weld plates that are spliced and will be FB012-005, and FB016-014-021. The ZPMC welder is Yang Gencheng, ID #066418 and the WPS used for this is WPS-B-P-2211-B-U2.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

### OBG Preassembly Bay 8

The QA Inspector observed ZPMC personnel pre-heat Internal Tower Diaphragm plate weld number ESD1-SA371-A/B-6B, but not weld.

The QA Inspector observed ZPMC personnel heat straighten with the use of a hydraulic jack, Diaphragm plate flanges.

The QA Inspector observed ZPMC QC personnel perform final Magnetic Particle Test (MT) the weld cover pass or weld cap on Internal tower diaphragm weld number SSD1-SA334-A/B-1A.

The QA Inspector observed ZPMC QC personnel were present and adequately monitoring the work.

### Summary of Conversations:

The QA Inspector had no significant conversations.

### Comments

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## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Stovall,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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